

ABSTRACT

A start signal outputting circuit according to the invention has a differential RF/DC convertor part 100 for converting a high frequency power (RF) into a d.c. potential (DC). The RF/DC convertor part 100 is formed by two transistors Q_{RD}, Q_{DD} working as a diode, and transistors Q_{R1-R3}, Q_{D1-D3} and resistances R_{R1-R3} for forming high resistances at anode sides and cathode sides of these diodes, respectively. A differential amplification part 200 disposed at a later stage of the diode has not only amplifying effect but also low-pass filtering effect together with filtering parts 120, 210 of its previous and later stages. In this case, it is designed so that current flowing through the respective circuits is about $2\sim 3\mu A$. As a result, even if the high frequency power of the specified frequency is weak, for example $-60\sim -40dBm$, a start signal outputting circuit 1000 which outputs a d.c. potential of $0.3\sim 2.4V$, is suitable for integration and has a low power consumption can be obtained.